

**Abstract**

A method and system for picking and placing vessels are provided. The system includes a gripper assembly mounted on a positioning mechanism. The gripper assembly includes a cylinder, a plurality of flexible gripping members extending from the cylinder in a spaced-apart relationship for receiving therebetween a vessel and holding it by friction, a piston slideably inserted inside the cylinder, and a plunger connected to and movable with the piston and extending between the gripping members for engaging the vessel. The method includes the steps of positioning the gripper assembly, picking up and transferring a vessel, and placing, seating and releasing the vessel. The contents of the vessel may also be mixed simultaneously during the transferring of the vessel.